REMARKS

Claims 1-7 are pending in the application. Applicants amend claim 1 for further clarification. No new matter has been added.

Applicant acknowledges with appreciation the Examiner's allowance of claims 5-6. Applicant respectfully submits that the provided reasons for allowance include only the Examiner's non-exhaustive interpretation, and should, therefore, not be construed as Applicant's concession on the entire scope of the allowed claims.

Claims 1, 2, and 7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0071148 to Ozaki et al.; and claims 3-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozaki et al. in view of U.S. Patent Application Publication No. 2005/0100008 to Miyata et al. Applicant amends claim 1 in a good faith effort to clarify the invention as distinguished from the cited references, and respectfully traverses the rejections.

The Examiner cited and relied upon Fig. 5, translation table block 400, Fig. 9, and paragraph [0008], lines 17-21 of Ozaki et al. as allegedly disclosing the claimed routing table features. Page 3, lines 8-11 of the Office Action.

Again, Ozaki et al. describe,

> "[a]nd the gateway device also has an address translation unit which controls a correspondence relation between the generated IPv6 address and the network identifier acquired by the device information acquisition unit," on paragraph [0008], lines 17-21.

Thus, an address translation unit as described in Ozaki et al. controls a correspondence relationship between a generated IPv6 address and a network identifier, but does not control a correspondence relationship between the generated IPv6 address and an output route.

Ozaki et al. also describe,

> "[a] translation table 400 held by gateway will be explained with reference to Fig. 5. The translation table 400 is used to make correspondence of an identifier (local address) of the non-IP device 100 on the non-IP network 200 to the IPv6 address allocated to the non-IP device 100. The translation table 400 is made up of one or more translation records 410. Each translation record 410 is constituted of a local address 411 and an IPv6 address 412. The local address 411 [is] an identifier for uniquely identifying a device connected to the non-IP network 200, and corresponds to an ECHONET address in the case of the ECHONET. Stored in the IPv6 address 412 is an IPV6 address of 128 bits," in paragraph [0043].

Thus, the translation table 400 stores only a local address and an IPv6, but is not constituted with information on an output route and an IPv6 address. And it would be impossible to perform routing of a received IP packet using the address translation table 400 because the address translation table does not include information on an output route.

As such, Ozaki et al., as cited and relied upon by the Examiner, fail to disclose a routing table storing information on an output route, the routing table being referred to for routing a received IP packet to an output route corresponding to a destination position identifier portion of the received IP packet.

The Examiner relied upon paragraph [0003], lines 1-4; paragraph [0005], lines 1-8; paragraph [0008], lines 11-13; Fig. 5; and paragraph [0043], lines 5-12 of Ozaki et al. as allegedly disclosing the claimed determining unit features. Page 3, lines 12-20 of the Office Action.

Ozaki et al. describe, on paragraph [0003], lines 1-4,

> "[i]n the aforementioned technique, in order for an HAVi device connected to a gateway to look like a virtual IP device, a combination of an IP address and a port number is used as its IP identifier."

The HAVi device is a non-IP device, and not an IP device. In other words, the HAVi device is not connected to an IP network.

Ozaki et al. describe, on paragraph [0005], lines 1-8,

> "[i]t is therefore an object of the present invention to provide a gateway device which can assign [a] unique IP address even to a device (which will be referred to as the non-IP device, hereinafter) connected to a network (which will be referred to as the non-IP network, hereinafter) other than the IP function network and can communicate with a device (which will be referred to as the IP device, hereinafter) connected to an IP network."

The gateway device assigns a unique IP address to a non-IP device that is connected to a non-IP network.

And Ozaki et al. describe, on paragraph [0046], lines 6-7,

> "[n]ext, the gateway judges whether or not to have already received the network ID in the IPv6 (step 502)."

Thus, Ozaki et al. only describe judging whether or not to have already received a network ID in IPv6, and do not disclose judging whether or not an IP address is assigned to each of a plurality of nodes connected to an IP network.

In view of the above, Ozaki et al., as cited and relied upon by the Examiner, fail to disclose a determining unit determining, for each of a plurality of ports of a router, whether a position identifier portion is assigned to an IP network to which the port is connected.

The Examiner relied upon paragraph [0005], lines 1-8 of Ozaki et al. as allegedly disclosing the claimed position identifier portion generating unit features. And again, such portion of Ozaki et al. only includes description of generating an IPv6 address for a non-IP device connected to a non-IP network, and, thus, fails to disclose an IPv6 address for a port connected to an IP network.

Ozaki et al. also describe, on paragraph [0046], lines 8-16,

> "[w]hen the gateway fails to receive the network ID in the IPv6, the gateway acquires the network ID from the portable phone 130 and stores it in the main memory 112. When the gateway already receives network ID, the gateway proceeds to a step 504. The gateway generates an IPv6 address on the basis of the interface ID 702 of the registration data 700 received in the step 501 or the network ID acquired in the step 503 or the network ID previously acquired and held in the main memory 112."

Thus, a network ID of the IPv6 address generated as described is the same as that of the portable phone 130, and is not newly generated.

The Examiner also contended that

> "the gateway has to search the translation table 400 for all the entries registered in the table to either find a match or if there is no match, to register a new entry," page 4, lines 5-7 of the Office Action.

The cited portions of Ozaki et al. only describe, however, the gateway searching the translation table 400 for all the entries registered in the table to either find a match after or before the IPv6 address is generated. The translation table 400 is not referred to when an IPv6 address is generated, as described in paragraph [0046], lines 8-16. And, as demonstrated above, the translation table 400 does not disclose a routing table, as claimed.

Furthermore, the network ID of the generated IPv6 address is not different from all network IDs of IPv6 addresses registered in the translation table 400.

Thus, Ozaki et al., as cited and relied upon by the Examiner, fail to disclose a position identifier portion generating unit newly-generating a position identifier portion different from all of position identifier portions registered in a routing table for a port when a determining unit determines that a position identifier portion is not assigned to the port.

In other words, Ozaki et al., as cited and relied upon by the Examiner, fail to disclose,

> "[a] router for automatically generating an IP address comprising a position identifier portion and an interface identifier portion, said router comprising:
>
> a routing table for storing each position identifier portion and information ***on an output route*** for the position identifier portion, said routing table being referred to for ***routing a received IP packet to an output route*** corresponding to a destination position identifier portion of said received IP packet;
>
> a determining unit for determining ***for each of a plurality of ports*** of said router whether a position identifier portion is assigned to an ***IP network*** to which the port is connected;
>
> a position identifier portion generating unit for using all of said position identifier portions registered in said routing table and ***newly-generating*** a position identifier portion ***different from all of the position identifier portions registered in said routing table*** for a port when said determining unit determines that the position identifier portion is not assigned to the port;
>
> a routing unit for receiving routing information including a position identifier portion according to a dynamic routing protocol and registering the routing information in said routing table, and registering routing information including the position identifier portion generated by said position identifier portion generating unit in said routing table and notifying another router of the routing information; and
>
> a position identifier portion advertising unit for advertising the generated position identifier portion from the port on the position identifier portion," as recited in claim 1. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 1, together with claims 2 and 7 dependent therefrom, is patentable over Ozaki et al. for at least the foregoing reasons.

The Examiner relied upon Miyata et al. as a combining reference to specifically address the additional features recited in dependent claims 3 and 4. And even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine this additional reference, such a combination would still have failed to cure the above-described deficiencies of Ozaki et al.

Again, Miyata et al. describe,

> "[i]f a random address creation method is selected, then the step 503 of sending Router Solicitation is performed to obtain an IPv6 address prefix 551 from a router in the same subnet. When the router sends Router Advertisement in response to Router Solicitation, a step 505 of receiving Router Advertisement is performed to obtain the address prefix 551," on paragraph [0100], lines 5-11.

That is, the IPv6 address prefix 551 is obtained from a router for generating IPv6 address prefix 551.

And Miyata et al. describe,

> "[s]econd, a step of creation an interface ID 506 is performed at random interface ID creation part 528 to create an IPv6 interface ID 552," on paragraph [0101], lines 1-3.

Miyata et al. fail to disclose, however, using all of interface prefixes or interface IDs registered in a routing table and generating an interface prefixes or an interface ID different from all interface prefixes or interface IDs registered in said routing table for a port.

In other words, Miyata et al., as cited and relied upon by the Examiner, fail to disclose a determining unit determining, for each of a plurality of ports of a router, whether a position identifier portion is assigned to an IP network to which the port is connected.

Accordingly, Applicant respectfully submits that claims 3-4 are patentable over Ozaki et al. and Miyata et al., separately and in combination, for at least the foregoing reasons.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

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